

**ABSTRACT OF THE DISCLOSURE**

A method for checking whether a transmission is a multicast transmission or not is disclosed, which includes in an Ethernet passive optical network including an OLT and 5 multiple ONUs connected to the OLT, checking whether a transmission is a multicast transmission or not by generating a multicast LLID that represents multicast information. Subsequently from a multicast MAC address in a MAC layer in the multiple ONUs or the OLT, so that at least one ONU from among the multiple ONUs or the OLT receives the multicast transmission, the method comprising the steps of: (1) modifying the multicast 10 MAC address and mapping the modified address to a LLID field in a RS layer below the MAC layer; and (2) generating mode information, which represents a multicast transmission, being adjacent to the LLID field and locating the mode information, wherein, the RS layer checks whether a transmission transmitted to the ONU or the OLT is a multicast transmission or not.